

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-27. (Cancelled)

28. (Previously Amended) A method for determination of concentration of one or more analytes in a test sample or an aliquot of a test sample of a complex biological fluid, comprising

a) mixing the sample or aliquot of the sample with one single reagent-wherein said reagent is provided in one single container or compartment of a container, and no other reagent is added during the performance of said method, and
said reagent comprises at least one type of binding molecule with specific affinity for one or more of said analytes, and

said reagent further comprises fluorescent moieties covalently linked to the binding molecules forming a binding pair, wherein the binding pair comprises a binding pair selected from the group consisting of:

(i) an aptamer or other synthetic binder with a molecular weight below 5,000 complexed to fluorescent moieties or fluorescent analogues of said analyte, fragments of said analyte, or derivatives of said analyte, wherein this mixing provides an analyte-binding molecule-fluorescent moiety complex of changed size, or

(ii) a peptide binder or peptidic synthetic binder with a molecular weight below 5,000 complexed with fluorescent moieties, wherein this mixing provides an analyte-binding molecule-fluorescent moiety complex of changed size, or

(iii) an antibody or an immunoactive antibody fraction complexed to fluorescent analogues of or fluorescent fragments of, or fluorescent derivatives of said analyte or analytes wherein this mixing provides a competitive reaction with resulting changed fluorescence, and;

b) irradiating a resulting mixture with polarized light to permit the excitation of said fluorescent molecules, and
c) measuring the polarization of the emitted light, and
d) calculating the concentration or concentrations of said analyte or analytes wherein said analyte or analytes is not an antibody.

29. (Previously Amended) A method according to claim 28, wherein the test sample or the aliquot of a test sample is whole blood or anti-coagulated whole blood.

30. (Previously Amended) A method according to claim 28, comprising using a reagent for each analyte comprising immunocomplexes between

a) an antibody or an immunoactive fragment of an antibody with specific affinity for said analyte or analytes, and

b) at least one of fluorescent analogues of said analyte or analytes, fluorescent fragments of said analyte or analytes, or fluorescent derivatives of said analyte or analytes.

31. (Previously Amended) A method according to claim 28, comprising using a reagent for each analyte comprising complexes between

a) an aptamer or another synthetic binder with a specific affinity for said analyte, and

b) at least one of fluorescent analogues of said analyte or analytes, fluorescent fragments of said analyte or analytes, or fluorescent derivatives of said analyte or analytes..

32. (Previously Amended) A method according to claim 28, comprising using a reagent comprising binding molecules with specific affinity for one or more of the analytes and with fluorescent moieties with absorption maximum between 600 nm and 1000 nm covalently linked to said binding molecules, said binding molecules being either a peptide or being synthetic binders.

33. (Currently Amended) A method according to claim 32, wherein the reagent comprises peptides or derivatives of peptides containing an amino acid sequence at least one of Ala-Arg-Asn-Arg-Asn (SEQ ID NO: 4) or Ala-Arg-Asn-Gly-Asn (SEQ ID NO: 5) and said reagent is used for the quantitation of C-reactive protein.

34. (Previously Amended) A method according to claim 28, comprising using a reagent comprising at least one of (i) fluorescent binding molecules with specific affinity for one analyte, or (ii) fluorescent analogues of, or fluorescent fragments of, or fluorescent derivatives of one analyte only.

35. (Previously Amended) A method according to claim 28, comprising using a reagent comprising different fluorescent moieties covalently bound to different binding molecules with different specific affinities.

36. (Previously Amended) A method according to claim 28, comprising using a reagent comprising one or more peptides or derivatives of peptides with specific binding affinity for an analyte, said binding peptides having a fluorescent residue covalently linked, wherein the peptide is less than 30 amino acids.

37. (Previously Amended) A method according to claim 36, wherein the binding peptide is less than 20 amino acids.

38. (Previously Amended) A method according to claim 37, wherein the binding peptide is less than 15 amino acids.

39. (Previously Amended) A method according to claim 28, comprising using a reagent with fluorescent residues with maximum coefficient of absorption at a wavelength above 640 nm.

40. (Previously Amended) A method according to claim 28, comprising using a reagent comprising at least one of cell lysing substances, anti-coagulants, or detergents.

41. (Previously Amended) A method according to claim 28, comprising using a reagent comprising one or more fluorescent moieties selected from the group consisting of fluoresceine, Texas Red, Cy5, other Cyanin derivatives, Rhodamin, Methyl Rhodamin, Ruthenium ligand complexes, lanthanoid elements such as Europium, Samarium or Terbium complex bound to a chelating ligand comprising DTPA, EDTA or N1.

42. (Previously Amended) A method according to claim 28, wherein the polarisation of the emitted light is measured as a function of time, either as a continuous kinetic reading or a reading of the change in the polarisation of the emitted light between two or more time points, or as a measurement of the polarisation of the emitted light after a defined point of time.

43. (Previously Amended) A method according to claim 28, wherein sample material or aliquot of the sample material comprises biological material, or a dilution or an extract or being dissolved from or being filtrated from the said biological material.

44. (Previously Amended) A method according to claim 28, wherein sample material or aliquot of the sample material comprises at least one of blood, blood serum, blood plasma, blood cells, lysate from blood or blood cells, urine, cerebrospinal fluid, tear liquid, sputum, semen, plasma, semen or material aspirated from the gastro-intestinal tract or feces, extract or filtrate from the suspension of feces, plant material or extracts thereof, or dissolved plant material or filtrate thereof.

45. (Previously Amended) A method according to claim 28, comprising using standards or calibrators comprising known concentrations of the analyte or the analytes, wherein the concentration or concentrations of said analyte or analytes in unknown samples is calculated by interpolation of the values obtained from the unknown samples on the standard curve obtained from said known standards or calibrators.

46. (Previously Amended) A method according to claim 28, comprising using a standard curve stored in an artificial memory.
47. (Previously Amended) A method according to claim 28, comprising using temperature correction algorithms, either generated empirically or theoretically, to compensate for differences in fluorescence polarisation caused by differences in temperature at different time of measurements between standards and unknown samples, between standards, or between unknown samples.
48. (Previously Amended) A method according to claims 28, wherein the reagent is provided in concentrated or dry form, the reagent is diluted or reconstituted before use, and the reagent is provided divided between different compartments for combination into one reagent prior to use.
49. (Previously Amended) A method according to claim 28, wherein said reagent comprises at least one type of binding molecule with specific affinity for one or more of the analytes, and said reagent comprises fluorescent moieties covalently linked to the binding molecules or fluorescent analogues of said analyte or analytes, fluorescent fragments of said analyte or analytes, or fluorescent derivatives of said analyte or analytes.
50. (Previously Amended) A method according to claim 49, wherein the reagent comprises complexes between a) an antibody or an immunoactive fragment of at least one of an antibody, an aptamer, or a synthetic binder with specific affinity for at least one analyte and b) at least one of fluorescent analogues of said analyte or analytes, fluorescent fragments of said analyte or analytes, or fluorescent derivatives of said analyte or analytes.
51. (Previously Amended) A method according to claim 49, comprising binding molecules with specific affinity for one or more of the said analytes and with fluorescent moieties with absorption maximum between 600 nm and 1000 nm-covalently linked to the said binding

molecules, and said binding molecules being either of peptide or aptamer composition or being synthetic binders.

52. (Currently Amended) A method according to claim 49, wherein the assay reagent comprises peptide binders or binders of derivatives of peptides, including fluorescent derivatives of said binders, containing at least one of the following amino acid sequences: Ala-Arg-Asn-Arg-Asn (SEQ ID NO: 4) or Ala-Arg-Asn-Gly-Asn (SEQ ID NO:5).

53. (Previously Amended) The method according to claim 28 comprising determining concentrations of biologically relevant substances in samples of biological material from living organisms in biological need of said biologically relevant substances.

54. (Previously Amended) Kit for determination of concentration of one or more analytes in a test sample or an aliquot of a test sample of complex biological fluid containing an analyte(s), comprising one or more containers, wherein the container(s) or compartment of the container(s) contains one single reagent, wherein the reagent comprises at least one type of binding molecule with specific affinity for the analyte(s), and

said reagent further comprises fluorescent moieties covalently linked to the binding molecules forming a binding pair, wherein the binding pair comprises a binding pair selected from the group consisting of:

(i) an aptamer or other synthetic binder with a molecular weight below 5,000 complexed to fluorescent moieties or fluorescent analogues of said analyte, fragments of said analyte, or derivatives of said analyte, or

(ii) a peptide binder or peptidic synthetic binder with a molecular weight below 5,000 complexed with fluorescent moieties, or

(iii) an antibody or an immunoactive antibody fraction complexed to fluorescent analogues of or fluorescent fragments of, or fluorescent derivatives of said analyte or analytes, a device for obtaining the exact volume(s) of the complex biological fluid that is needed in order to perform the method adequately.

55. (Previously Amended) Kit according to claim 54, wherein the reagent which is contained in the container or the compartment of a container, is formed to a ready-for-use reagent by mixing the content from different containers prior to immediately prior to, or in connection with, the execution of the analysis.